

4. (Amended) A composite according to Claim 2, further comprising means for preventing laser irradiation light used in the formation of the passageway from being optically coupled with the optical transmission means.

6. (Amended) A composite according to Claim 4, wherein the preventing means comprises at least one wavelength selective mirror or beam splitter and a light beam absorbing means embedded at an appropriate position within the carrier.

7. (Amended) A composite according to Claim 1, further comprising detectable locating means arranged to be used in locating the position of the high-quality optical surface from the exterior of the carrier.

9. (Amended) A composite according to Claim 7, further comprising a depth marker embedded within the composite to indicate when the passageway has been formed to the correct depth.

10. (Amended) A composite according to Claim 9, wherein the depth marker comprises the position marker.

11. (Amended) A composite according to Claim 7, wherein the position marker or the depth marker comprises a sacrificial coating which is arranged to be removable after the formation of the passageway to access the optical transmission means.

14. (Amended) A composite according to Claim 1, wherein the optical interface surface comprises at thermally expanded core optical fibre connected to the optical transmission means.

15. (Amended) A composite according to Claim 1, further comprising an alignment structure embedded within the carrier for aligning an interface means with the optical transmission means via the optical interface surface.

16. (Amended) A composite according to Claim 1, further comprising optical processing means embedded within the carrier, the optical processing means being optically connected to the optical transmission means for processing light to or from the optical transmission means and providing the optical interface surface.

19. (Amended) A composite according to Claim 16, wherein the optical processing means comprise means for collimating a light beam.

21. (Amended) A composite according to Claim 16, wherein the optical processing means comprises at least one of the group comprising an optical grating element, a wave-guide, a wave plate, a hologram and an optical filter.

22. (Amended) A composite according to Claim 16, further comprising a micro-substrate on which the optical processing means is provided and secured to the optical transmission means.

23. (Amended) A composite according to Claim 22, wherein the alignment structure is provided on the micro-substrate.

24. (Amended) A composite according to Claim 1, wherein the optical transmission means comprises an elongate structure and the optical interface surface is provided at a side of the elongate structure.

28. (Amended) A composite according to Claim 1, wherein the optical transmission means comprises an optical fibre.

(Applicant's Remarks are set forth hereinbelow, starting on the following page.)